Infection Control

Wichita VAMC mandatory training

Goal of Infection Control

One of Wichita VA Medical Center's goals is to prevent exposure and spread of infections to patients, students, employees, volunteers, contractors and visitors.

Goal of Infection Control

All healthcare personnel are required to know how to prevent and control diseases by:

- being familiar with the controls put in place at our facility and,
- being able to apply the controls available

By knowing and applying these controls, you will play a major role in disease prevention.

Infection Control - Training Objectives

- Identify hazards of infectious disease in the workplace
- Identify tactics to reduce exposures
- Apply safe work practices
- State the major components of the Infection Control Plan
- Learn correct actions to take in case of accidental exposure

The Chain of Infection

To understand the importance of measures to prevent and control the spread of germs at our facility, it helps to understand the Chain of Infection. All three of the following links in the chain of infection must be present in order for an infection to occur:

1. Infectious agent
2. Means of transmission
3. Susceptible host

The Chain of Infection

Controlling infection involves breaking the chain of infection.

Important Elements

At our medical center, the following 3 elements play an extremely important role in our Infection Control Plan:

1. Strong coaches who are actively involved and encourage infection control practices.
2. Key staff members who promote and sustain behavior
3. Individual integrity and commitment to infection control.

Infection Control – The right thing

Another essential component of our Infection Control Program is to provide education that motivates you to cooperate and comply with our policies and protocols.

YOUR integrity and commitment motivates you to do what should be done instead of what's easiest to do.

Our infection control program cannot work successfully without your integrity and commitment to do. . . **the right thing**!!

Infection Control – The right thing

Call Yvonna Tozier, RN, BSN, Infection Control Program Manager, at extension **53716** if you have any infection control questions.

Breaking the Chain of Infection

We continuously and diligently work to break the chain of infection by establishing protocols to prevent transmission of infectious disease at our facility.

Many of our efforts are identified in our Bloodborne/Tuberculosis Exposure control Plans, which are maintained in our Infection Control Manual located on the VA Common.

Breaking the Chain of Infection

These plans embody our facility's efforts to break the chain of infection and to assure the safety of our patients, volunteers, students, contractors and, most importantly,

YOU!

Infection Control Standards

Standard Bloodborne Pathogens

The Bloodborne Pathogen Standard was developed by the Occupational Safety and Health Administration (OSHA) to eliminate or minimize employee exposure to bloodborne pathogens. The Standard and its directives- the final rule on occupational exposure to bloodborne pathogens - are contained in Title 29 Section 1910.1030 of the Code of Federal Regulations.

Standard Bloodborne Pathogens

The latest revision to OSHA's final rule was written into law in December 2008.

Elements addressed by the OSHA Bloodborne Pathogen directive include specific requirements for the following:

- Written exposure control plan
- Implementation of Standard Precautions or Body-Substance Isolation

OSHA Bloodborne Pathogen directive includes specific requirements for the following:

- Engineering and Work Practice Controls
- Personal Protective Equipment
- Housekeeping, Equipment Cleaning and Sterilization
- Sign, Label, and Color-coding
- Emergency procedures
- Violation reporting

The 2001 revision addressed emerging technologies, as well as accommodations required by the Needlestick Safety and Prevention Act.

Standard – Tuberculosis (TB)

In 1994, the Centers for Disease Control & Prevention (CDC) published a comprehensive set of recommendations for the control of tuberculosis (TB) in healthcare settings.

OSHA has proposed a rule on TB control that incorporates the elements of these recommendations. Until the final rule is passed, we are guided by the current OSHA Respiratory Standard which contains a modification for TB. The Standard and its directives are contained in

Title 29 Section 1910.139 of the Code of Federal Regulations.

Standard – Tuberculosis (TB)

Our facility maintains a TB control program based upon a heirarchy of three levels of control measures:

1. Administrative controls
2. Engineering controls, and
3. Personal respiratory protection

Standards – Training requirements (TB)

The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and OSHA require training on Prevention of Occupational Exposure to Blood-borne Pathogens and TB as part of your initial and annual training.

Additionally, JCAHO measures performance based on our effort to track, prevent and control nosocomial transmissions of infection among patients, employees, medical staff members, contract service workers, volunteers, students and visitors.

Three Infectious Viruses

Three infectious viruses to be fully aware of and trained in the control of are:

1. HIV (Human Immunodeficiency Virus)
2. HBV (Hepatitis B Virus)
3. HCV (Hepatitis C Virus)

Human Immunodeficiency Virus (HIV)

HIV (Human Immunodeficiency Virus) is the virus that causes AIDS (Acquired Immunodeficiency Syndrome).

The virus attacks the immune system, rendering the patient vulnerable to various infections and/or diseases.

HIV is a bloodborne pathogen. It resides in blood and certain body fluids.

HIV

A person acquires the virus when HIV-infected blood or body fluids come in contact with your blood and/or body fluids.

The most common way of acquiring HIV in a hospital is through an accidental needle stick. Splashes into the mucous membrane of the eyes or nose, or entry through an open cut are also possible.

HIV

The best way to protect yourself from HIV is to set up barriers between you and **all** blood or body fluids.

Always assume that blood or body fluids are infectious. As a minimum, wear protective gloves. Use other personal protective equipment such as goggles, face shields, or gowns when you anticipate any splash or splatter of blood or body fluids.

HIV

If you think you have been exposed, thoroughly wash or flush the area of exposure.

Then, immediately contact your supervisor and go to Employee Health so they can investigate the incident. (In certain cases, the risk of acquiring HIV may be reduced if post-exposure prophylaxis is administered within 2 hours.)

HIV

If an exposure occurs on off-shifts or weekends, notify your supervisor, then report to Urgent Care for Treatment. Follow-up with Employee Health the next regular work day.

Hepatitis B Virus (HBV)

Hepatitis B is one of several forms of viral hepatitis. The virus attacks the liver, making the patient very sick. It can cause chronic liver disease, cirrhosis, and can lead to liver cancer.

HBV is a bloodborne pathogen. It resides in blood and certain body fluids. The virus can stay infectious for at least a month on a surface at room temperature.

HBV

You acquire the virus when HBV infected blood or body fluids come in contact with your blood or body fluids.

The most common way of acquiring HBV in a hospital is through an accidental needle stick. Splashes into the mucous membrane of the eyes or nose, or entry through an open cut are also possible.

HBV

At work, protect yourself from HBV by setting up a barrier between you and any blood or body fluids. Always treat blood or body fluids as if they are infectious!

As a minimum, wear protective gloves. Use other personal protective equipment (PPE) when you anticipate any splash or splatter of any blood or body fluids.

HBV

If you think you have been exposed to HBV, thoroughly wash or flush the area of exposure.

Then, immediately contact your supervisor and go to Employee Health so they can investigate the incident.

If exposure occurs on off-shifts or weekends, notify your supervisor, then report to Urgent Care for treatment. Follow-up with Employee Health the next regular workday.

Always report an exposure immediately after it occurs.

Hepatitis C Virus (HCV)

Hepatitis C is a bloodborne virus that causes hepatitis (inflammation of the liver) in those infected. The virus attacks the liver, which can cause chronic liver disease, liver cancer and cirrhosis

HCV is currently the leading cause of liver transplantation. Many people infected with HCV have no obvious symptoms even though the virus is at work damaging liver cells.

HCV

The virus is a bloodborne pathogen and resides in blood and certain body fluids.

One acquires the virus when HCV-infected blood or body fluids come in contact with your blood.

The most common way of acquiring HCV in a hospital is through an accidental needlestick.

HCV

- Splashes into the mucous membrane of the eyes or nose, or entry through an open cut are other possible ways to catch the disease.
- At work, protect yourself from HCV by always using a barrier between you and any blood or body fluids.
- Always treat blood or body fluids as if they are infectious! At a minimum, wear protective gloves.

HCV

- Use other personal protective equipment (PPE) when you anticipate any splash or splatter of any blood or body fluids.
- Unfortunately, there is no vaccine for HCV, but it is still very important to document any exposure.
- If you think you have been exposed to HCV, thoroughly wash or flush the area of exposure.

HCV

- Immediately notify your supervisor and go to Employee Health so they can assess the exposure and initiate screening of you and the source patient.
- If an exposure occurs on off-shifts or weekends, notify your supervisor, then report to Urgent Care for treatment. Followup with Employee Health the next regular work day.

Other Potentially Infectious Material (OPIM)

In addition to HIV, HBV and HCV, there are other sources of infection known here as Other Potentially Infectious Material (OPIM).

OPIM are generally found in blood, vomit, stool, urine, draining lesions, etc. OPIM may cause a variety of infectious diseases.

These diseases are caused by direct contact with infectious body fluids.

TB - Review

TB (Mycobacterium tuberculosis) is an airborne bacteria that causes tuberculosis in those infected.

TB is a disease mainly affecting the lungs, but it may affect other parts of the body.

The bacteria resides in the alveoli of the lungs and is passed on through airborne means.

TB is detectable and treatable.

TB - Review

TB is passed through the air.

You may become infected if you breathe in the bacteria expelled into the environment when a TB-infected person coughs, sneezes, talks or sings.

This airborne bacteria finds its way to the alveoli of the lungs and resides there, causing the disease.

TB - Review

Suspected TB patients are placed in special negative airflow rooms which are designed to reduce transmission and protect others.

If your job requires that you care for suspected or TB patients, you are required to undergo training on proper use of a positive air pressure respirator (PAPR). An initial medical evaluation is required and fit-testing is mandatory before you enter these rooms.

TB - Review

If you think you have been exposed to TB, contact your supervisor and go to Employee Health immediately so they can investigate the suspected exposure.

Infection Control follows all TB cases and will notify Employee Health of any potential exposures.

Employee Health will do follow-up, such as TB skin test (PPD), chest x-ray or cultures as needed.

OPIM – Review

There are other pathogens you may be exposed to in the workplace. Here are a few:

- **C.diffcile**
- **Cytomegalovirus** (CMV)
- **Herpes**
- **Multi-Drug Resistant Organisms**:

  MRSA (Methicillin-resistant Staph. Aureus)

  VRE (Vancomycin-resistant Enterococci)

OPIM - Review

These pathogens are transmitted by direct contact with a person's infected body fluids such as urine, stool, saliva, or draining lesions.

Stool, vomit, urine, tears, sweat, sputum, and nasal secretions are not known to transmit bloodborne pathogens unless they contain visible blood, but these body fluids MAY be associated with the other infectious pathogens discussed here.

OPIM - Review

Protect yourself from these pathogens by guarding against exposure.

Place a barrier between you and all blood and body fluids. Wear gloves, whenever you anticipate contact with blood, oral secretions, urine, feces, wound drainage, vomit, peritoneal fluid, or any other moist body excretion or secretion.

Wear a gown if spray or splatter to clothing or skin is anticipated. Wear a mask with eye shields if a spray or splatter to the face is anticipated.

OPIM - Review

If you think you've been exposed, clean the exposed area with soap and water. Then, contact your supervisor and go to Employee Health immediately so that they can investigate the exposure. Employee Health will determine what actions are necessary.

If an exposure occurs on off-shifts, or weekends, notify your supervisor, then report to Urgent Care for treatment. Followup with Employee Health the next regular work day.

Airborne Viruses

Airborne viruses are microorganisms expelled by an infected person and transported by minute droplets or dust particles that remain suspended in the air for long periods of time. These droplets or particles are spread by air currents and inhaled by a susceptible host.

Special air handling and ventilation help prevent airborne transmission.

Infection Control Summary

Now that you've met a few of the worst viruses in our workplace, the next pages will introduce you to the individual elements of our Infection Control Program.

It is our goal to prevent, control and or eliminate occupational exposure to those viruses at our facility.

Infection Control Plan

The following slides identify this facility's Infection Control Plan.

Any questions should be directed to

Yvonna Tozier, RN, BSN

Infection Control Program Manager,

extension 53716

The plan is readily accessible to all employees who may be at risk to exposure. Ask your supervisor if you wish to view the Infection Control Plan.

Infection Control Plan

Breaking the Infection Chain

Our Infection Control Plan embodies our facility protocols to break the chain of infection and assure the safety of our patients, volunteers, students, contractors and, most importantly – YOU!

The plan is explained in detail on the following pages and contains 10 sections that cover requirements of federal law, JCAHO, OSHA and other governing center memorandums.

Infection Control Plan

The following components of our Infection Control Plan are included in this training:

- Exposure determination
- Engineering controls
- Work practice controls
- Personal Protective Equipment (PPE)
- Standard and transmission-based precautions
- Housekeeping
- Vaccinations
- Emergency procedures
- Incident reporting
- Violation reporting

Infection Control Plan Exposure Determination

Assessing Risk of Exposure

In our Infection Control Plan, all job classifications are assessed annually and classified according to risk:

Infection Control Plan
Exposure Determination

Classification I

Jobs in which required tasks routinely involve potential for exposure to blood or body fluids.

Classification II

Jobs in which required tasks normally do not involve the potential for exposure to blood and body fluids, but may require performing unplanned Classification 1 tasks.

Infection Control Plan Exposure Determination

Personnel Not Covered by the Standard

Jobs in which required tasks involve no greater risk of exposure than would be encountered by a visitor, and the worker can decline to perform tasks which involve a perceived risk without threat of retribution.

Infection Control Plan

Engineering Controls

What are Engineering Controls?

They constitute those controls which isolate or remove the bloodborne, airborne, or other pathogen hazards from the workplace. (They would include items such as sharps disposal containers, self-sheathing needles – as well as negative-airflow rooms.)

Infection Control Plan

Engineering Controls

We regularly review appropriate, commercially available safety devices and implement those that prove to be effective at eliminating or minimizing worker exposures and injuries.

Provision of medical waste and sharps containers, as well as communication of hazards by means of signs and labels, constitute Engineering Controls.

Infection Control Plan

Engineering Controls

Our Medical Waste Management Policy requires color-coded waste containers and appropriate labeling. This policy establishes Engineering Controls that help ensure waste is disposed of properly – thereby preventing or containing exposure to infectious diseases. This coding/labeling also allows you to recognize potentially infectious materials and take proper precautions.

Engineering Controls

STOP This is for BIOMEDICAL WASTE ONLY, DO NOT USE FOR SONIC CUPS, PIZZA HUT BOXES, McDONALDS SACKS. BIOHAZARD WASTE IS VERY COSTLY TO DISPOSE OF SO LET'S ALL PITCH IN AND SAVE $$$$$$.

Infection Control Plan

Sharps Containers

These containers serve as an Engineering Control by providing a safe waste container for used syringes, needles, disposable sharp objects, IV guide wires, and blood tubes. Our sharps receptacles contain biohazard labels. These containers are located in all patient care areas and other areas where “sharps” are utilized. NEVER dispose of gauze, paper, gloves, or other “non-sharp” items in these “sharps” containers.

Infection Control Plan
Engineering Controls

- Negative Pressure

  One of the tactics used to contain airborne bacteria, such as TB, is to control the air pressure and flow in the patient's room.

  Negative pressure ensures that air will not flow out of the room when the door is opened, thus preventing the spread of any airborne bacteria.

Infection Control Plan

Engineering Controls

- Specimen Containers

  These containers are an Engineering Control. By using these and labeling them properly, specimen material is contained and identified.

- Specimen containers should be placed in a clear zip-lock bag with a biohazard label for transport.

Infection Control Plan

Engineering Controls

- Safer Needle Devices

  A safer needle device uses Engineering Controls to prevent needlestick injuries before, during, or after use through built-in safety features. There are many different types of these devices, therefore, you should always learn how to use the device you have before using it on patients. However, the common feature of all these devices is that they reduce the risk of needlestick injuries to healthcare workers.

Infection Control Plan

Engineering Controls

- Signs and Labels

  Signs and labels provide a visual early warning. A simple graphic can serve to provide information about a potentially hazardous condition.

  Always watch for these obvious warnings and take appropriate precautions.

Infection Control Plan
Engineering Controls

Biohazard Warning Labels

Biohazard Warning Labels must be present on the following items:

- Bags and containers of medical waste
- Refrigerators and freezers used to store blood or other potentially infectious material
- Sharps containers
- Containers used to store or transport blood or other potentially infectious material

Infection Control Plan
Work Practice Controls

Work Practice Controls are those controls that reduce the likelihood of exposure by altering the manner in which a task is performed.

Examples:

- Proper handwashing techniques
- Prohibiting recapping of needles by a two-handed technique

Infection Control Plan
Work Practice Controls

- Handwashing

  Experts insist that the all time #1 method for cutting down on infection is warm water, soap, and a good 10-15 second hand scrub.

  It's a simple and inexpensive preventive measure. The problem is that often healthcare workers don't see the immediate value of handwashing..

  - Did you know . . . If you must touch a paper towel dispenser handle to get a towel, you should get the towel **before** you wash your hands.

Infection Control Plan
Work Practice Controls

- How to Wash Hands Correctly
  - Remove all jewelry, including watch
  - Wet hands under warm running water
  - Keep hands lower than elbows when rinsing them
  - Apply soap; wash and rub vigorously for 10-15 seconds. Use friction to scrub all surfaces of the hands. Pay attention to your fingernails, cuticles, and between fingers. If soap is unavailable, you can use alcohol, gel or foam.

Infection Control Plan
Work Practice Controls

Wash Before & After Each Patient Contact

Next to handwashing, consistent use of barrier methods, especially wearing gloves, is the most important step in preventing cross-contamination of staff and patients.

Infection Control Plan
Work Practice Controls

If you believe your gloves are torn or punctured:

- Remove and dispose of them properly
- Wash your hands
- Put on new gloves

Wash your hands immediately or as soon as feasible after removal of gloves or other protective equipment.

Infection Control Plan
Work Practice Controls

- What about lotion?

Human skin is the best barrier against infection that Mother Nature can provide – which is why it is important to keep skin soft, supple, and intact.

Because healthcare workers are required to wash their hands frequently, hand lotions may be used even though it is discouraged, however…..

Should lotion be needed, do not use oil-based lotion as it will deteriorate latex gloves.

Infection Control Plan
Work Practice Controls

- Prevention is the best policy!

Remember – you can be exposed through the mucous membrane, as well as through ingestion or inhalation!

Do NOT:

eat, drink, smoke, apply cosmetics or lip balms, manipulate contact lenses, or put anything in your mouth in an area where you may be exposed to infectious material.

Infection Control Plan
Work Practice Controls

- Sharps Injuries

  According to OSHA research data, hollow-bore needles are the cause of injury in 68.5% of the cases.

Infection Control Plan
Work Practice Controls

- Sharps Injuries

  Hollow-bore needles (the type used for giving injections or drawing blood) are the devices most often associated with transmissions of bloodborne pathogen infections. This is because the blood remaining inside the bore of the needle after use contains a larger volume of virus than the relatively small amount of blood remaining on the outside of a solid core needle (i.e. a suture needle).

Infection Control Plan
Work Practice Controls

- Break the chain of infection by addressing the possible consequences of your actions before you act.
- It is important that you follow our facility procedures to prevent injuries caused by needles, scalpels, and other sharp instruments or devices during procedures, when cleaning used instruments, during disposal of used needles, and when handling sharp instruments after procedures.

Infection Control Plan
Work Practice Controls

- 5 Activities Associated with Sharps Injuries

  These 5 activities are associated with the majority of needlesticks among healthcare workers:

1. Disposal of needles
2. Administering injections
3. Drawing blood
4. Recapping needles
5. Handling trash and dirty linens

Infection Control Plan
Work Practice Controls

Downstream Injuries (such as cleaning up after a procedure has been completed, carrying out trash, and washing soiled linens) are particularly threatening to the employee because the source of the needle is generally unknown.

DO NOT recap needles.

Infection Control Plan
Work Practice Controls

Disposal of Sharps

To prevent injuries caused by “used” sharps”

- Place disposable syringes and needles, scalpel blades, and other sharp items in an appropriately labeled, puncture-resistant, leakproof container for disposal.
- Place reusable sharps in an appropriately labeled, puncture-resistant, leakproof container for transport to the reprocessing area.

DO NOT recap needles!

Infection Control Plan
Work Practice Controls

Your Responsibility

The federal Needlestick Safety and Prevention Act mandates that all needlesticks or cuts (even if it does not lead to illness), must be entered into a log (OSHA log 301) located in Employee Health.

Infection Control Plan
Work Practice Controls

OSHA log 301

The log must contain:

1. The type and brand of equipment involved in the incident,
2. The department or work area where the incident occurred,
3. An explanation of how the incident occurred

This allows our facility to trend the sharps injuries and investigate means to possibly prevent further incidents. All information regarding test results are confidential.

Infection Control Plan
Work Practice Controls

It is **your responsibility** to report all needlesticks or cuts!

DO NOT recap needles!

Infection Control Plan
Work Practice Controls

- **Our Responsibility**

  It is our practice to regularly evaluate the feasibility of integrating new technologies and updating our Engineering Controls / Work Practice Controls to ensure the safety and health of our patients, visitors, volunteers, contractors, and especially – YOU!

Infection Control Plan
Personal Protective Equipment

- **Personal Protective Equipment (PPE)**

  To protect yourself from exposure to infectious material, there are specific pieces of equipment in healthcare that you may need. We provide and maintain, at no cost to you, appropriate PPE such as, but not limited to, the following:

  - Gloves (utility, disposable)
  - Masks, eye protection and face shields
  - Outer garments such as gowns, aprons, lab coats, surgical caps or hoods, shoe covers, booties
  - Positive Air Pressure Respirator (PAPR)
  - Resuscitation bags, mouthpieces, pocket masks

Infection Control Plan
Personal Protective Equipment

- **Usage**

  Personal protective clothing and equipment should always be used when there is the risk of exposure to blood or body fluids.

- **Eye/Face Protection**

  Masks, face shields, or goggles all fall into this category.

  These devices protect you from splashes or splatters of potentially infectious material to your mucous membrane areas – your eyes, nose, or mouth.

Infection Control Plan
Personal Protective Equipment

Gloves

- Gloves prevent potentially infectious material from getting onto your hands. They provide a barrier to contact with potentially infectious pathogens.
- Single use gloves – wear these whenever you anticipate hand contact with potentially infectious material. Replace your gloves if they become visibly soiled, torn, or punctured. Always remove gloves after completing a task with a single patient.

Infection Control Plan
Personal Protective Equipment

Gloves

- Gloves should be made of a waterproof material such as latex, nitrile, or rubber. Always inspect them for punctures or tears prior to use – and replace them if they become damaged.

Infection Control Plan
Personal Protective Equipment

Gloves

- Replace disposable gloves and wash hands after completing task with each patient or if gloves are contaminated, torn, punctured, or barrier properties are compromised. Never wash or decontaminate disposable gloves for reuse. A variety of gloves, including powder-less and hypoallergenic gloves are available. If you are allergic to latex, notify Employee Health to determine the appropriate solution.

Infection Control Plan
Personal Protective Equipment

Utility Gloves

- Utility gloves, worn by Environmental Service workers, may be decontaminated for reuse if their integrity is not compromised. However, they must be discarded if cracked, peeling, torn, punctured, or otherwise exhibiting signs of deterioration, or when their ability to function as a barrier is compromised.

Infection Control Plan
Personal Protective Equipment

Single-Use Gloves

- Handwashing must occur after removing gloves. Never try to wash or disinfect single-use gloves for reuse. This will enlarge the pores and weaken their effectiveness. Gloves must be disposed of properly.

Infection Control Plan
Personal Protective Equipment

Utility Gloves

- These gloves are used when protection from chemicals (such as cleaning solvents) is required.
- These gloves may be decontaminated and reused as long as they are still free of punctures or tears.

Infection Control Plan
Personal Protective Equipment

Hypo-Allergenic Gloves

Some employees are allergic to the single-use gloves because they are made of latex.

Hypo-allergenic gloves can be used as a substitute by those employees allergic to standard gloves.

Infection Control Plan
Personal Protective Equipment

Resuscitation Devices

- Resuscitation devices and mouth pieces provide a barrier for you when performing CPR by eliminating the need for mouth-to-mouth contact. These are available in all patient areas.
- Clear plastic bags with a biohazard label are available for use in transporting lab specimens.

Infection Control Plan
Personal Protective Equipment

Surgical Caps

- Surgical caps prevent potentially infectious material from splashing onto your head or into your hair. This material could be carried into unprotected areas or to your home. You could touch the infectious material and transfer it to your eyes, nose, or mouth.
- Surgical caps are restricted to the operating room or for selected procedures where splashing of a large volume of blood/body fluid is likely to occur.

Infection Control Plan
Personal Protective Equipment

Gowns

- The type of gown you use will depend on your task. Fluid-resistant gown provide protection against possible splatters to your clothing which then could infect your or others.
- Fluid-proof garments are used when a potential exists for your clothing becoming soaked with blood or other potentially infectious materials. ALL gowns are to be removed before leaving the room.

Infection Control Plan
Personal Protective Equipment

Contaminated clothing

- If any clothing becomes contaminated with blood or body fluids, immediately remove the clothing and wear scrubs provided by the hospital.
- Notify laundry to pick up the contaminated clothing for cleaning. Make sure you label your clothing appropriately.

Infection Control Plan
Personal Protective Equipment

Shoe Covers

- Shoe covers prevent potentially infectious material from splashing onto your shoes, socks, or feet. This material could be carried into unprotected areas or to your home. You could touch the infectious material and transfer it to your eyes, nose or mouth.
- Shoe covers are restricted to the operating room and for very special procedures expected to produce large volume blood/body fluid exposures.
- They are to be REMOVED before leaving the room.

Infection Control Plan
Personal Protective Equipment

Face Protection

- **Masks** in combination with eye protection, such as goggles or glasses with solid side shields, should be worn whenever splashes, sprays, splatter, or droplets of blood or body fluids may be generated, and when eye, nose, or mouth contamination can be reasonable anticipated. They ARE TO BE REMOVED when leaving the room.

Infection Control Plan
Personal Protective Equipment

Face Protection

- **Reusable goggles** are to be cleaned with hospital disinfectant by the user of the goggles. They should be thoroughly cleaned and rinsed with water before reuse.
- **Did you Know** . . . Eyeglasses without sidepieces are not considered Personal Protective Equipment (PPE).

Infection Control Plan
Personal Protective Equipment

Special Face Protection

- Splash-protection goggles should be used to protect your eyes when there is a risk of splashing or vaporizing contaminated fluids.
- Splashing can occur during lab spill clean-up procedures and while providing first aid or medical assistance.

Infection Control Plan
Personal Protective Equipment

Special Face Protection

- Face shields should be used to prevent contaminated fluids from entering your nose or mouth. Remove upon leaving the room.

Infection Control Plan
Personal Protective Equipment

Garments

- Always wear gown, aprons, and other protective body covering in occupational exposure situations. The type and characteristics of the covering will depend on the task and degree of exposure anticipated.
- In all circumstances, the garment chosen should not allow blood or body fluids to pass through to your skin or mucous membranes.
- After use, dispose of coverings in appropriate receptacles. Do NOT wear down the hallways.

Infection Control Plan
Personal Protective Equipment

Additional Protection

- Additional protective clothing – such as surgical caps or hoods, shoe covers, or boots – should be worn when gross contamination of the head or feet is reasonably anticipated (such as decontamination, urologic procedures, surgery, etc.)

Infection Control Plan
Personal Protective Equipment

Barrier Devices

- Barrier devices shall be used in place of mouth-to-mouth resuscitation. Following use, such items (if reusable) should be decontaminated.
- Discard disposable devices in the appropriate receptacles.

Infection Control Plan
Personal Protective Equipment

Removal/Disposal

- Personal Protective Equipment (PPE) should be removed:
  - After contact with an individual patient,
  - As soon as you leave the work area,
  - As soon as possible if it is obviously contaminated.
  - Always place the removed PPE into the proper trash container. PPE that is grossly contaminated with body fluids (i.e. wet enough to drip) should be contained at the source and taken to the biomedical trash container.

Infection Control Plan
Standard Precautions

Standard Precautions

- Standard Precautions/Body Substance Isolation (BSI) are exposure prevention strategies based upon this premise:

"All blood and body fluids should be treated as if they are infectious for HIV, HBV, HCV and other pathogens."

Infection Control Plan
Standard Precautions

Standard Precautions or Body Substance Isolation (BSI) are designed to control occupational exposure to bloodborne pathogens.

- Making the assumption that all blood and body fluids are infectious means that engineering controls, certain work practices, and PPE will always be used.

Infection Control Plan
Standard Precautions

The Standard Precautions/Body Substance Isolation (BSI) are:

- **Handwashing** before and after patient contact.
- **Use of gloves** when touching blood, body fluids, secretions, excretions and contaminated items.
- **Use of a mask, eye protection, and gown** during procedures likely to generate splashes or sprays of blood, body fluids, secretions or excretions.

Infection Control Plan
Standard Precautions

The Standard Precautions/Body Substance Isolation (BSI) are (continued):

- Handle contaminated patient-care equipment and linen in a manner that prevents the transfer of microorganisms to people or equipment.
- Practice care when handling sharps and use a mouthpiece or other ventilation device as an alternative to mouth-to-mouth resuscitation when practical.
- Place the patient in a private room when feasible if he/she might contaminate the environment.

Infection Control Plan
Transmission-Based Precautions

- **Transmission-based precautions** must be implemented when a patient has, or is suspected to have a highly transmissible agent. These are in addition to Standard Precautions / Body Substance Isolation (BSI) which is used on ALL Patients!!!!

Infection Control Plan
Transmission-Based Precautions

Contact Precautions are indicated whenever there is potential for direct contact between an infectious person and an object or another person. Contact transmission is a physical transfer of microorganisms from person to person, or from person to object and then to another person.

Infection Control Plan
Transmission-Based Precautions

Contact Precautions:

- Place the patient in a private room, if possible.
- If necessary, the patient can be placed with someone with the same infection, with approval of Infection Control. *(remember foam in/foam out)*
- Use gloves when entering the room.
- Wear a gown when entering the room if prolonged contact with the patient is anticipated, or if the patient has diarrhea, a colostomy, or wound drainage not covered by a dressing.

Infection Control Plan
Transmission-Based Precautions

Contact Precautions, continued:

- Limit movement or transport of patient from the room.
- Ensure that patient-care items, bedside equipment, and frequently touched surfaces receive daily cleaning.
- Dedicate use of noncritical patient-care equipment to a single patient, or cohort of patients with the same pathogen. If not feasible, adequate disinfection between patients is necessary.

Standard Precautions
Transmission-Based Precautions:

Airborne Precautions are indicated when dust particles can become contaminated with infectious matter or when infectious organisms stay suspended in the air for a long period of time.

Airborne organisms or dust particles are carried by air currents and can travel a great distance depending on environmental factors. Patients must be placed in a negative airflow room. If a negative pressure room is not available, a HEPA filter will be used to filter the room air.

Infection Control Plan
Transmission-Based Precautions

Guidelines for AIRBORNE ISOLATION-----

If you have a patient on **Airborne isolation**, you:

- **Patient Placement;** Private Room with monitored Negative Air pressure. KEEP ROOM DOOR CLOSED AND PATIENT IN ROOM.
- **Respiratory Protection-Wear an N-95 respirator mask for known or suspected AFB disease.** Susceptible persons should not enter room of pts, with known or suspected measles (rubeola) or chicken pox (varicella) if immune caregivers are available. Discard mask, gloves and gowns in ante room.
- **Patient Transport** – Limit movement/transport of patients from room to essential purposed only. PLACE SURGICAL MASK ON PATIENT !

Infection Control Plan
Transmission-Based Precautions

Droplet Precautions are indicated whenever droplets are sent into the air when an infected person coughs, sneezes or talks, or by certain procedures such as suctioning and bronchoscopy. *The difference between airborne and droplet is the size of the propelled organism.* A droplet will not carry more than a few feet. A mask is required when working near the patient.

Infection Control Plan
Transmission-Based Precautions

Droplet Precautions:

- Place the patient in a private room, if possible.
- If necessary, the patient can be placed with someone with the same infection, with the approval of Infection Control.
- Use a mask when working with the patient.

Infection Control Plan
Transmission-Based Precautions

Droplet Precautions (continued):

- Limit movement or transport of the patient, Use a mask on the patient if they need to be moved.

Did you know?

The distinction between airborne and droplet particulate is determined by the size of the small-particle residue. Droplets do not remain suspended in the air – while airborne particles may remain suspended in the air for long periods of time.

Infection Control Plan

Housekeeping

General Housekeeping Rules

The general housekeeping rules for you to follow are:

- Keep the facility clean
  - Clean and decontaminate at the end of your workshift
    - Handle contaminated laundry correctly

    NOTE: All cleaning and disinfecting products are approved by the Infection Control Committee prior to use in any department.

Infection Control Plan

Housekeeping

Cleanup of Blood Spills

When cleaning blood spills, always wear appropriate PPE for the nature and size of the spill, use an approved disinfectant, and dispose of the cleaning material properly.

Small spills or splatters (generally less than 100 ml) can be cleaned up by any employee who is knowledgeable on how to protect themselves from exposure.

Infection Control Plan
Housekeeping

Cleanup of Blood Spills

Large spills – Initiate the Hazardous Material **SPIL** Response:

S – Secure the area

P – Protect persons

I – Inform

L – Leave for clean-up team

Infection Control Plan
Housekeeping

Cleanup of Broken Glass

Broken glass has the hazard of possibly penetrating your skin, leaving you vulnerable to the possibility of acquiring infectious pathogens.

Do not pick up broken glass with your hands. Call Housekeeping to report the breakage. Housekeeping will use mechanical means for cleanup, such as a dustpan or vacuum.

Infection Control Plan
Vaccinations

Preventing Infection Before It Occurs

- At the time of your employment, we offer a free Hepatitis B Vaccine series to those of you who are likely to be exposed to bloodborne pathogens.
- If you have not already received this vaccine, we highly recommend that you take it.

Infection Control Plan
Vaccinations

Other vaccinations may be available if you haven't already had them, such as Diptheria/Pertussis/Tetanus, Measles/Mumps/Rubella, Polio and Smallpox.

Additionally, vaccines for Chickenpox, Pneumonia, and Influenza are now available.

Infection Control Plan

Emergency Procedures

Immediate Actions

1. **Stop Exposure**
2. **Get Help Quickly**
3. **Report Incident**

Infection Control Plan
Emergency Procedures

Immediate Actions

STOP further exposure by following these procedures:

- **Wash** contaminated areas with soap & water
- **Flush** eyes or other mucous membrane areas with water
- **Remove** contaminated clothing

Infection Control Plan
Emergency Procedures

Immediate Actions

- **Notify your supervisor immediately** and in person *after* you have taken the actions to stop further exposure.
- Co-workers may also be able to help you with clean up.

Infection Control Plan
Emergency Procedures

Immediate Actions

- Go to Employee Health as soon as possible after cleanup and notification of your supervisor.
- If the source patient is at high risk for HIV or HBV, the facility offers post-exposure prophylactic medication that may help prevent infection. These medications should be started as close to the exposure time as possible.

Infection Control Plan
Emergency Procedures

Immediate Actions

On weekends or off-shifts, report to the ER then follow up with Employee Health the next regular work day.

Infection Control Plan
Emergency Procedures

The Exposed Individual

- Upon receiving a report of exposure, Employee Health will conduct a medical evaluation of the exposed employee.
- With signed consent, the exposed employee will get a blood test for HCV, HBV, and HIV.
- If he/she initially chooses not to have blood tested for the presence of HIV, the blood sample will be retained for 90 days in case an HIV test is desired later.

Infection Control Plan
Emergency Procedures

The Exposed Individual

The exposed individual may provide documentation of independent blood testing, if preferred.

All test results are confidential.

Infection Control Plan
Emergency Procedures

The Source Individual

- Additionally, the individual who was the source of the potentially infectious material will be medically evaluated.
- The source individual will be asked to give consent for HIV, HBV and HCV blood testing. The results of that test will be made known to the exposed employee.

Infection Control Plan
Emergency Procedures

No Cost to You

- The exposed employee has the right to all medical evaluations, treatments, and follow up at no cost.
- Treatment will be available at a reasonable time and place and will be supervised by a licensed physician or healthcare professional.

Infection Control Plan
Emergency Procedures

Confidentiality is Assured

The results of these tests and other medical information will remain confidential.

Infection Control Plan
Emergency Procedures

If you have been exposed to HBV

If it is determined that you have been exposed to HBV and have not been vaccinated with the available HBV series, this post-exposure prophylaxis – HBIG – may be useful.

Infection Control Plan
Emergency Procedures

If you have been exposed to HBV,

Here are the facts:

- HBIG is Hepatitis B Immune Globulin.
- It needs to be initiated as soon as possible, preferably within 24 hours, but no more than 7 days after exposure.
- Multiple doses of HBIG are administered.
- To increase the effectiveness of HBIG it is highly recommended to also begin the Hepatitis B vaccine at this time.

Infection Control Plan
Emergency Procedures

If you have been exposed to HIV,

- If it is determined that you have been exposed to HIV, Employee Health will explain your post-exposure treatment options.

Infection Control Plan
Incident Reporting

Evaluating the Exposure Incident

In order to identify/correct problems and prevent recurrence of similar incidents, any occupational exposure incident shall be evaluated.

Infection Control Plan
Incident Reporting

The evaluation will include the following information:

- Engineering controls in place at time of incident
- Work practice controls in place at time of incident
- Personal protective equipment (PPE) and clothing utilized at time of incident.
- Policy and/or control failures.

Infection Control Plan
Incident Reporting

Trending and Tracking

To contain the spread or prevent certain infectious diseases, they are reportable to the local Board of Health or Infection Control for surveillance and trending. On the following slides are lists of infectious diseases that are tracked and reported to local Board of Health or Infection Control.

Infection Control Plan
Incident Reporting

Trackable/Reportable Infectious Diseases:

Amebiasis

Anthrax

Botulism

Brucellosis

Chickenpox

Cholera

Trackable/Reportable Infectious Diseases:

Creutztfeldt-Jakob Disease

Crimean-Congo Hemorrhagic Fever

Diptheria

Ebola Hemorrhagic Fever

Encephalitis

Haemophilus Influenza

Infection Control Plan
Incident Reporting

Trackable/Reportable Infectious Diseases:

Hemorrhagic viral fevers (Lassa fever, others)

Hepatitis, viral

Herpes virus simiae

Herpes Zoster Infection

Human Immunodeficiency Virus (HIV)

Kawasaki Syndrome

Legionella

Infection Control Plan
Incident Reporting

Trackable/Reportable Infectious Diseases:

Marburg Hemorrhagic Fever

Meliodosis

Measles (rubeola)

Meningitis

Mumps

Mycobacteria other than TB infections

Mycobacteria Tuberculosis

Trackable/Reportable Infectious Diseases:

Mycoplasma pneumonia

Neisseria meningitis

Norwegian scabies

Pertussis (whooping cough)

Plague, Bubonic or Pneumonic

Poliomyelitis, acute

Psittacosis, ornithosis

Infection Control Plan
Incident Reporting

Trackable/Reportable Infectious Diseases:

Rabies

Rickettsial Fever, tickborne

Rocky Mountain Spotted Fever

Rubella (German Measles)

Salmonellosis

Scarlet Fever

Shingles

Infection Control Plan
Incident Reporting

Trackable/Reportable Infectious Diseases:

Smallpox

Syphilis

Tapeworm infections, all types

Tetanus

Trichonosis

Varicella

Infection Control Plan
Violation Reporting

Your Rights

You will not be punished or discriminated against for exercising such rights as:

- Participating in OSHA inspections
- Reporting to management, union, OSHA or other governmental agency about job safety or health hazards
- Participating in workplace safety and health activities
- Participating in proceedings before the Occupational Safety and Health Review Commissison

Infection Control Plan
Summary and Review

Congratulations! You have completed the instructional portion of this module.

You are now equipped with the knowledge and skills to:

- Identify hazards of infectious disease in the workplace and tactics to reduce exposure.
- Apply safe work practices including selecting Personal Protective Equipment (PPE), handwashing techniques and recognizing biohazard signs
- State the major components of the Infection Control Plan
- Select the correct actions to take in the event of accidental exposure.